



Apr 18th, 1:30 PM - 2:30 PM

Investigation of Foraging Strategies of *Xiphophorus Helleri*: Group versus Solitary Feeding

Mark A. Bobofchak
Illinois Wesleyan University

Sheryl Swartz Soukup, Faculty Advisor
Illinois Wesleyan University

Follow this and additional works at: <https://digitalcommons.iwu.edu/jwprc>

Bobofchak, Mark A. and Soukup, Faculty Advisor, Sheryl Swartz, "Investigation of Foraging Strategies of *Xiphophorus Helleri*: Group versus Solitary Feeding" (1998). *John Wesley Powell Student Research Conference*. 3.

<https://digitalcommons.iwu.edu/jwprc/1998/posters2/3>

This is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This material has been accepted for inclusion by faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu.

©Copyright is owned by the author of this document.

Poster Presentation 21

INVESTIGATION OF FORAGING STRATEGIES OF *XIPHOPHORUS HELLERI*: GROUP VERSUS SOLITARY FEEDING

Mark A. Bobofchak and Sheryl Swartz Soukup*
Department of Biology, Illinois Wesleyan University

In any foraging situation, an animal must determine if the benefits of continuing to forage in a particular manner exceed costs such as exposure to predators and lost reproductive opportunities. In addition to these costs, other factors exist which influence foraging decisions; including hunger level and competitive ability. Specifically, these conditions have been shown to have a significant effect on the choice of an organism to feed in a group or individually. Experiments were conducted using female green swordtail fish, *Xiphophorus helleri*, to determine which foraging situation (group or solitary) is chosen in four different treatment sets: normal diet/no predator present; reduced diet/no predator present; normal diet/predator present; reduced diet/predator present. Preliminary results suggest the fish subjects prefer the group environment to the solitary one in all cases.